

**Table 4-12: MAJOR DRAINAGE STRUCTURES**

Stream Name	Stream ID	Alt	Associated Wetlands	Hydraulic Requirements	Merger Team Recommendation
Tributary to White Oak River	W-1	2C	4, 5, 6	Two 8x4 RCBC	Two 8x4 RCBC
	W-2	2A/2C	4, 5, 6	Two 8x4 RCBC	Two 8x4 RCBC
	W-9	2A	45	Two 7x5 RCBC	100 ft Bridge
	N/A	2A	42	N/A	Culvert/Pipe
White Oak River	W-8	2A	46	135 ft Bridge	1,160 ft Bridge
	W-14	2C	35, P5	150 ft Bridge	560 ft Bridge
Goshen Branch	T-15	4D/4E	130, 131	N/A	380 ft Bridge
Trent River	T-16	4D/4E	132, 135	290 ft Bridge	1,180 ft Bridge
Deep Gully	D-1	4D/4E	217	Two 8x4 RCBC	420 ft Bridge

RCBC = reinforced concrete box culvert, span by rise, dimensions given in feet

#### 4.1.5.3.4 Surface Water

The length of impacted ponds, perennial, and intermittent stream channels for each alternative are presented in **Table 4-13**. The impacts were calculated based on the length of each stream within the proposed construction limits plus 25 feet on either side for construction staging activities. The *Natural Systems Report (ESI, August 2001)* and the *Wetland and Stream Delineation Reevaluation and Neuse River Riparian Buffer Reassessment (ESI, October 3, 2007)* include additional details about each stream. The evolution of stream impacts as the Detailed Study Alternatives were refined is discussed in the following section alongside wetland impacts.

Perennial streams are those meeting the criteria set forth by the NCDENR Division of Water Quality (DWQ). Perennial streams are considered to possess the consistent hydrology to support aquatic populations. Important streams are classified based on guidance from the US Army Corps of Engineers (USACE). The USACE is responsible for making the final importance decision. Compensatory mitigation is required for important stream channel impacts greater than 150 linear feet.

**TABLE 4-13: FINAL JURISDICTIONAL STREAM IMPACTS\***

		Detailed Study Alternatives				
		2A	2C	3	4D	4E
Streams (Linear Feet)	Perennial	503	0	0	297	297
	Intermittent	1,062	2,531	157	1,384	1,140
	Total	1,565	2,531	157	1,681	1,437
Open Water (Acres)	Ponds	0	2.39	0.03	0	0
	Rivers/Streams-R2	0	0	0.04	0.12	0
	Total	0	2.39	0.07	0.12	0

\* Impacts as of May 2010 Merger Process Team meeting